

-16-

What is claimed is:

1. An engine control apparatus for a vehicle comprising:
an overturn detecting unit for detecting overturning by an acceleration sensor having a detection shaft disposed laterally of a body of the vehicle; and
an engine stopping unit for stopping an engine of the vehicle in response to overturning detection by said overturn detecting unit,
wherein said overturn detecting unit is constructed to determine that the vehicle has overturned when a number of times said acceleration sensor detects average values of outputs exceeding an overturn threshold reaches a first preset value, and said overturn detecting unit is provided with a restoration unit for releasing the engine stop by said engine stopping unit when the number of times said acceleration sensor detects outputs below a restoration threshold reaches a second preset value after the overturning of the body of the vehicle is detected.
2. The engine control apparatus for a motorcycle according to claim 1, wherein said second preset value is smaller than said first preset value.
3. The engine control apparatus for a motorcycle according to claim 1, wherein said restoration threshold is set to a value smaller than said overturn threshold.
4. The engine control apparatus for a motorcycle according to claim 2, wherein said restoration threshold is set to a value smaller than said overturn threshold.

5. The engine control apparatus for a motorcycle according to claim 1, wherein a weight assigning unit assigns a lesser weight for a higher detected output to reflect the detected output on said average value according to the deviation of the detected output of said acceleration sensor with respect to said average value.

6. The engine control apparatus for a motorcycle according to claim 2, wherein a weight assigning unit assigns a lesser weight for the higher detected output to reflect the detected output of said average value according to the deviation of the detected output of said acceleration sensor with respect to said average value.

7. The engine control apparatus for a motorcycle according to claim 3, wherein a weight assigning unit assigns a lesser weight for the higher detected output to reflect the detected output on said average value according to the deviation of the detected output of said acceleration sensor with respect to said average value.

8. The engine control apparatus for a motorcycle according to claim 4, wherein a weight assigning unit assigns a lesser weight for the higher detected output to reflect the detected output on said average value according to the deviation of the detected output of said acceleration sensor with respect to said average value.

9. The engine control apparatus for a motorcycle according to claim 1, wherein a light weight is assigned to a detected value that is largely deviated from the averaged output of the acceleration sensor, and a heavy weight is assigned to a detected value that is less deviated from the averaged output.

10. The engine control apparatus for a motorcycle according to claim 2, wherein a light weight is assigned to a detected value that is largely deviated from the averaged output of the acceleration sensor, and a heavy weight is assigned to a detected value that is less deviated from the averaged output.

11. The engine control apparatus for a motorcycle according to claim 3, wherein a light weight is assigned to a detected value that is largely deviated from the averaged output of the acceleration sensor, and a heavy weight is assigned to a detected value that is less deviated from the averaged output.

12. The engine control apparatus for a motorcycle according to claim 4, wherein a light weight is assigned to a detected value that is largely deviated from the averaged output of the acceleration sensor, and a heavy weight is assigned to a detected value that is less deviated from the averaged output.

13. A method of controlling an engine for a vehicle, comprising:
detecting overturing of the vehicle by an acceleration sensor having a detection shaft disposed laterally of a body of the vehicle;
stopping an engine of the vehicle in response to overturning detection by said overturn detecting unit;
determining that the vehicle has overturned when a number of times said acceleration sensor detects average values of outputs exceeding an overturn threshold reaches a first preset value,

releasing the engine stop by said engine stopping unit when the number of times said acceleration sensor detects outputs below a restoration threshold reaches a second preset value after the overturning of the body of the vehicle is detected.

14. The method of controlling an engine for a vehicle according to claim 13, further comprising the step of setting said second preset value smaller than said first preset value.

15. The method of controlling an engine for a vehicle according to claim 13, further comprising the step of setting said restoration threshold to a value smaller than said overturn threshold.

16. The method of controlling an engine for a vehicle according to claim 14, further comprising the step of setting said restoration threshold to a value smaller than said overturn threshold.

17. The method of controlling an engine for a vehicle according to claim 13, further comprising the step of assigning a light weight to a detected value that is largely deviated from the averaged output of the acceleration sensor, and a heavy weight to a detected value that is less deviated from the averaged output.

18. The method of controlling an engine for a vehicle according to claim 14, further comprising the step of assigning a light weight to a detected value that is largely deviated from the averaged output of the acceleration sensor, and a heavy

weight to a detected value that is less deviated from the averaged output.

19. The method of controlling an engine for a vehicle according to claim 15, further comprising the step of assigning a light weight to a detected value that is largely deviated from the averaged output of the acceleration sensor, and a heavy weight to a detected value that is less deviated from the averaged output.

20. The method of controlling an engine for a vehicle according to claim 16, further comprising the step of assigning a light weight to a detected value that is largely deviated from the averaged output of the acceleration sensor, and a heavy weight to a detected value that is less deviated from the averaged output.